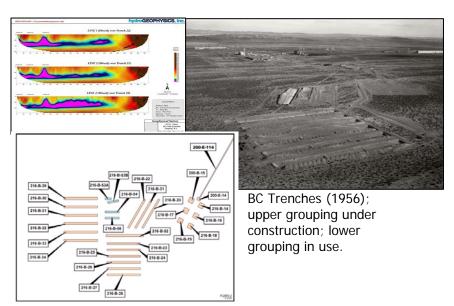
# Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford (RL-0040); and River Corridor Closure Project (RL-0041)

- M. B. Lackey, Vice President of Deactivation and Decommissioning Project/(509) 373-9519
- M. M. Belles, Vice President of Closure Services and Infrastructure/(509) 373-3990



Completed demolition of Emergency Decontamination Facility on March 10, 2005 in preparation for Kadlec Hospital expansion



### **Overview**

This section addresses Project Baseline Summary (PBS) RL-0040, *Nuclear Facility Deactivation and Decommissioning (D&D), Remainder of Hanford.* There are three major components to this work scope:

- Deactivation and Decommissioning (M. B. Lackey);
- · Waste Site Remediation (M. B. Lackey); and
- Reliability Projects (M. M. Belles).

This section also includes PBS RL-0041, *Nuclear Facility D&D, River Corridor Closure Project*, until this work scope transitions to the River Corridor Contractor (M. B. Lackey).

NOTE: Unless otherwise noted, all information contained herein is as of the end of March 2005.

### **Notable Accomplishments**

# PBS RL-0040, Nuclear Facility D&D, Remainder of Hanford

### **Deactivation and Decommissioning:**

### **U Plant Demolition Project:**

During this reporting period, demolition of the 272-U structure was completed; seven of ten structures have been completed to date. Completion of the U Plant Ancillary Facility demolition is forecast in July 2005, eight months ahead of schedule and \$5.5M under budget.

#### **Waste Site Remediation:**

### 200 Area Remedial Investigation/Feasibility Study (RI/FS) Work:

200 Area Remedial Investigation (RI) work drilling and sampling were completed and decommissioning was initiated at 216-Z-7 Crib in 200-LW-1/200-LW-2 Chemical Laboratory Waste Group Operable Units on March 23, 2005.

Chemical ecological sampling was completed in the BC Control Area on March 18, 2005. Nine ecological sampling sites were staked and surveyed, and six sites were radiologically surveyed in preparation for ecological sampling to start in April. Work supports ecological risk assessment work for the Central Plateau.

Collaborative meetings between Fluor Hanford (FH), RL, and the State of Washington Department of Ecology (Ecology) on the 200-SW-1/200-SW-2 Nonradiological and Radiological Solid Waste Operable Units were completed on March 30, 2005. These meetings resulted in an agreed pathforward for revising the RI Work Plan.

#### **U Plant Zone Closure:**

Completed draft Surface Geophysical Survey Technical Memo on March 25, 2005. RL submitted the Sample Analysis Plan (SAP) to regulators on March 25, 2005, and the Focused Feasibility Study (FS) and Proposed Plan (PP) to regulators on April 4, 2005. A notice was faxed for PP public review on April 8, 2005. A draft Resource Conservation and Recovery Act (RCRA) Permit (Part A) was transmitted to Ecology on April 5, 2005.

#### **BC Cribs and Trenches:**

High Resolution Resistivity (HRR) scans were obtained for 216-B-20 Series Trenches on March 22, 2005. Preliminary analysis indicates a continuous contamination plume is beneath these trenches and the adjacent trench grouping.

### Notable Accomplishments, continued

### **Reliability Projects:**

The contract for Project L-325, "A-8 Substation Replacement," was awarded on March 9, 2005.

Demolition of the Emergency Decontamination Facility was completed on March 10, 2005, in preparation for Kadlec Hospital's expansion.

Project L-304, "Hanford Site Emergency Alerting System," for the installation of reader boards, was completed on March 31, 2005.

Project L-577, "300 Area Safety Access Portals," was completed April 4, 2005.

### PBS RL-0041, Nuclear Facility D&D, River Corridor Closure Project

#### **Uranium Disposition:**

As of April 22, 2005, shipments of 1,040 boxes of uranium have been completed, with 270 boxes remaining. The 303-B Building, one of three Nuclear Category 3 facilities used to store the unused fuel, was emptied on April 20, 2005. The project is now forecasting an early accelerated fuel shipment completion by the end of May 2005, sixteen months ahead of the Tri-Party Agreement milestone date.

#### **Special Case Waste:**

As of April 18, 2005, a total of 22 cans/materials have been identified for removal from dry storage. All 22 cans have been moved into the upper levels of the unit and are waiting for final removal to A Cell. The work packages to remove the cans/materials are in the final stages of preparation for presentation to the Enhanced ALARA Committee (EAC). The lead lined drum load-out mechanism was successfully repaired on April 1, 2005.

#### 300 Area D&D:

Demolition preparation and transite removal for 3762 and 3764 Buildings continued; demolition is forecast for completion in May 2005. Demolition preparation of three additional buildings (3506-A, 3506-B, 3701-U) was initiated; demolition for completion is forecast for June 2005.

## FY 2005 Funds vs. Spend Forecast (\$M)

	Projected FY 2005 Funding	FY 2005 Fiscal Year Spend Forecast	Variance
RL-0040 Nuclear Facility D&D, Remainder of Hanford	\$ 80.0	\$ 77.1	\$ 2.9
RL-0041 Nuclear Facility D&D, River Corridor Closure	\$ 19.9	\$ 17.3	\$ 2.6
Total	\$ 100.0	\$ 94.5	\$ 5.5

## FY 2005 Schedule/Cost Performance (\$M)

		Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule	Schedule Variance %	Cost Variance \$	Cost Variance %	Budget At Completion
RL-0040	Nuclear Facility D&D, Remainder of Hanford	\$32.4	\$33.4	\$31.7	\$1.0	3.2%	\$1.7	5.1%	\$76.7
RL-0041	Nuclear Facility D&D, River Corridor Closure	\$8.3	\$9.4	\$7.6	\$1.1	13.6%	\$1.8	18.8%	\$19.5
	Total	\$40.7	\$42.8	\$39.4	\$2.2	5.0%	\$3.5	8.1%	\$96.2

Numbers are rounded to the nearest \$0.1M.

#### Schedule Performance (+\$2.2M/+5.0%):

The favorable variance in PBS RL-0040 is primarily due to favorable progress on D&D activities (+\$1.8M), and for Reliability Projects (+\$1.1M) as a result of progress in completing FY 2004 carryover work scope/ahead of schedule FY 2005 projects +(\$6.5M); offset by delays in initiating new starts due to continuing resolution and pending funding decisions (-\$5.4M). Of the -\$5.4M unfavorable variance, \$2.0M will be eliminated with the implementation of approved Baseline Change Requests (BCRs) to reflect final scope/funding decisions.

This is partially offset by unfavorable progress in Waste Sites Remediation (-\$1.7M): 1) Delays to 200-PW-1 Plutonium/Organic-Rich Process waste Group A-8 borehole and Step 2 field investigations, and 2) Delays in obtaining Record of Decision (ROD) for the remediation of the U Plant Waste Sites have delayed confirmatory sampling, remedial design, and planning for barrier construction. Mitigation actions: The A-8 borehole and Step 2 field investigation are expected to be completed during FY 2005. Delays to U Plant Waste Sites will be recovered in FY 2006 by performing RDR/RAWP reviews concurrently and completion of construction in a shorter period of time.

The favorable variance in PBS RL-0041 is due to uranium shipments being accomplished ahead of plan.

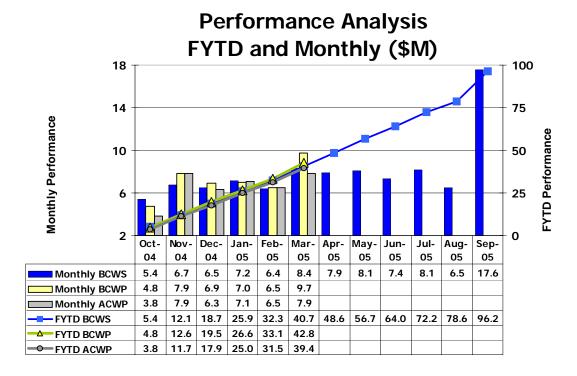
#### Cost Performance (+\$3.5M/+8.1%):

The favorable variance in PBS RL-0040 is primarily attributed to D&D activities (+\$3.3M) due to efficiencies in demolition activities and PM&S (+\$0.7M). This is partially offset by the Waste Sites (-\$2.1M) due to additional costs to support the U Plant Waste Sites ROD process, decommissioning of the S-7 borehole (200-PW-2), and increased costs for the commissioning of the T-28 borehole as a result of unexpected levels of contamination on the drill casing. Impacts/mitigation activities: The U Plant Waste Site overrun will be recovered in FY 2006 by completing confirmatory sampling and barrier construction more efficiently than planned. The 200-LW-1 and 200-PW-2 overruns may not be recoverable.

Additionally, Reliability Projects' costs have increased because of the nationwide increase in cost of steel and large fabricated parts required for Projects L-334, "Minimize Potential Environmental Impacts from Export Water System Ruptures," and L-376, "Facility Safety and Efficiency Renovations." Impacts/mitigation activities: Utilizing FH reserves (\$0.5M) for Project L-334 to offset cost increase.

The favorable variance for PBS RL-0041 is due to continued efficiencies in 300 Area Surveillance and Maintenance, Uranium Disposition, and 300 Area Treated Effluent Disposal Facility (TEDF) operations.

## FY 2005 Schedule/Cost Performance, continued



### **Milestones**

PBS	MSN	Title	Туре	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	TRP-03-242 M-015-40C	Submit 200-CW-5 U Pond/Z Ditches Cooling Water Group FS & Submit	HQ	10/31/04	10/29/04		Completed ahead of schedule
RL-0040		M-91-40L.1.D Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/01/04	11/12/04		Completed ahead of schedule
RL-0040	TRP-03-139 M-013-000	Submit 1 200 NPL RI/FS (RFI/CMS) Work Plan	HQ	12/31/04	12/20/04		Completed ahead of schedule
RL-0040	WMG-04-009 M-091-40K	M-91-40K Update 218-E-12B SAP	HQ	01/15/05	08/24/04		Completed ahead of schedule
RL-0040	WMG-05-005 M-091-40L-005	M-91-40L.2.A Submit Quarterly Burial Ground Vent and substrate Sample	HQ	03/01/05	02/17/05		Completed ahead of schedule
RL-0040	WMG-05-010 M-091-40J	M-91-40J UPDATE 218-W-3A SAP	HQ	45 day before field work begins			On schedule
RL-0040	WMG-05-009 M-091-40I	M-91-40I Update 218-W-4B SAP	HQ	45 day before field work begins			On schedule
RL-0040		M-91-40L.2.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	06/01/05			On schedule
RL-0040		M-91-40L.2.C Submit Quarterly Burial Ground Vent and substrate Sample	HQ	09/01/05			On schedule
RL-0040	TRP-03-260 M-015-46A	200 Area Chemical Lab Waste OUs Remedial Investigation Report.	HQ	10/31/05			On schedule

# Milestones, continued

PBS	MSN	Title	Туре	Due Date	Actual Date	Forecast Date	Status / Comments
RL-0040	TRP-03-248 M-020-39	Submit 216 S-10 Pond and Ditch Closure Plan to Ecology	HQ	11/30/05			On schedule
RL-0040	TRP-03-245 M-015-39C	Submit 200-CS-1 Chemical Sewer Group FS and Submit PP/Proposed	HQ	11/30/05			On schedule
RL-0040	WMG-06-001 M-091-40L-008	M-91-40L.2.D Submit Quarterly Burial Ground Vent and substrate Sample	HQ	12/01/05			On schedule
RL-0040	TRP-04-324	Issue Action Memorandum for U Plant Ancillary Facilities	RL	12/31/05	01/23/04		Completed ahead of schedule
RL-0040	TRP-04-323	Issue Record-of-Decision for Canyon Disposition Initiative	RL	12/31/05			On schedule
RL-0040	TRP-03-257 M-020-33	Submit Closure/Post Closure Plans for 216-A-10 Crib, Etc.	HQ	12/31/05			On schedule
RL-0040	TRP-03-263 M-015-44A	200-MW-1 OU Remedial Investigation Report	HQ	12/31/05			On schedule
RL-0040	TRP-03-254 M-015-43C	Submit 200-PW-2 OU FS & Proposed Plan/Proposed RCRA Permit Mod	HQ	12/31/05			On schedule
RL-0040	WMG-06-005 M-091-40L-009	M-91-40L.3.A Submit Quarterly Burial Ground Vent and substrate Sample	HQ	03/01/06			On schedule
RL-0040	TRP-04-320	Demolish Ten U Plant Ancillary Facility Structures	RL	03/31/06		07/31/05	Forecast ahead of schedule
RL-0040	TRP-04-321	Demolish 10 B Plant Structures	RL	03/31/06	09/14/04		Completed ahead of schedule
RL-0041	TRP-04-325	Package, Ship and Dispose of Remaining N Reactor Fuel	RL	03/31/06		05/31/05	Forecast ahead of schedule
RL-0040	WMG-06-006 M-091-40L-010	M-91-40L.3.B Submit Quarterly Burial Ground Vent and substrate Sample	HQ	06/01/06			On schedule
RL-0040	WMG-06-007 M-091-40L-011	M-91-40L.3.C Submit Quarterly Burial Ground Vent and substrate Sample	HQ	09/01/06			On schedule
RL-0040	TRP-03-266 M-015-46B	200 Area Chemical Laboratory Waste OUs Feasibility Study	HQ	09/30/06			On schedule
RL-0040	WDG-06-402	Remediate BC Cribs and Trenches	RL	09/30/06			On schedule
RL-0040	WDG-06-401	Remediate U Plant Area High RiskWaste Sites	RL	09/30/06			On schedule
RL-0040	TRP-04-322	Demolish 12 additional B Plant Structures	RL	09/30/06	09/14/04		Completed ahead of schedule
RL-0041	TRP-04-326 M-092-06-T02	Complete the Disposal/Disposition of Un-Irradiated Metal Fuel	RL	09/30/06		05/31/05	Forecast ahead of schedule
RL-0041	TRP-04-326 M-092-16-T02	Complete Removal of Phase III Special Case Waste from 300 Area	RL	09/30/06		09/30/05	Forecast ahead of schedule